

IN THE CLAIMS

Please cancel Claims 21-25, without prejudice or disclaimer of subject matter and add Claims 26-35, as indicated below. The following is a complete listing of the claims, and replaces all earlier versions and listings.

1. - 25. (Canceled)

26. (New) An encoded data generation method for generating encoded data in JPEG2000 format, by a client including storage means for storing fragmentary first encoded data of JPEG2000 encoded data managed by a server, comprising:

 a calculation step of calculating second encoded data from the JPEG2000 encoded data managed by the server, wherein the second encoded data is designated by a user as a portion of the JPEG2000 encoded data and excludes the fragmentary first encoded data stored in the storage means;

 a request step of requesting of the server the second encoded data obtained in the calculation step;

 an acquisition step of acquiring the second encoded data from the server;

 a storage step of storing in the storage means the second encoded data obtained by the acquisition step;

a segmentation step of segmenting the JPEG2000 encoded data managed by the server into a plurality of independent encoded data segments, each segment being a unit of display;

a determination step of determining, for each independent encoded data segment, whether all layer encoded data of the plurality of independent encoded data segments are stored in the storage means;

a dummy storage step of storing in the storage means dummy encoded data if the layer encoded data is not stored in the storage means; and

an output step of outputting the dummy encoded data, the second encoded data, and the fragmentary first encoded data stored in the storage means as encoded data having JPEG2000 format.

27. (New) The method according to claim 26, further comprising:

a substitution step of substituting, if the layer encoded data are stored in the storage means, the encoded data stored in the storage means with the plurality of independent encoded data segments obtained in the segmentation step.

28. (New) The method according to claim 26, wherein the encoded data are processed for respective packets.

29. (New) The method according to claim 26, wherein the dummy encoded data is zero length packet data specified by JPEG2000.

30. (New) The method according to claim 26, wherein the segmentation step includes a step of segmenting the encoded data into a plurality of tiles, each tile having a predetermined size.

31. (New) The method according to claim 26, wherein the client further comprises display means for displaying image data, the fragmentary first encoded data is encoded data of the image data, and said method further comprises:

a setting step of setting the portion of the JPEG2000 encoded data designated by the user by at least one of moving and enlarging a display region of image data displayed on the display means;

a decoding step of decoding the encoded data output in the output step; and

a displaying step of displaying the decoded image data on a screen of the display means.

32. (New) The method according to claim 27, wherein the determination step, the dummy storage step, the substitution step, and the output step are processed in parallel for at least two segments of the plurality of independent encoded data segments obtained in the segmentation step.

33. (New) An encoded data generation apparatus in a second computer including storage means for storing fragmentary first encoded data of encoded data managed by a first computer, comprising:

a first storage unit configured to store the fragmentary first encoded data of the encoded data managed by the first computer;

a calculation unit configured to calculate second encoded data from the JPEG2000 encoded data managed by the server, wherein the second encoded data is designated by a user as a portion of the JPEG2000 encoded data and excludes the fragmentary first encoded data stored in the storage means;

a request unit configured to request of the first computer the second encoded data obtained in the calculation step;

an acquisition unit configured to acquire the second encoded data from the first computer;

a second storage unit configured to store the second encoded data obtained by the acquisition step;

a segmentation unit configured to segment the JPEG2000 encoded data managed by the server into a plurality of independent encoded data segments, each segment being a unit of display;

a determination unit configured to determine, for each independent encoded data segment, whether all layer encoded data of the plurality of independent encoded data segments are stored in the storage means;

a third storage unit configured to store dummy encoded data if the layer encoded data is not stored in the storage means; and

an output unit configured to output the fragmentary first encoded data, the second encoded data, and the dummy encoded data stored in the first storage unit, the second storage unit and the third storage unit, respectively, as encoded data having JPEG2000 format.

34. (New) The apparatus according to claim 34, wherein the first and second computers can communicate with each other via a network.

35. (New) A computer-readable medium encoded with computer-readable instructions for causing a second computer including storage means for storing fragmentary first encoded data of encoded data managed by a first computer to generate JPEG2000 encoded data, the instructions comprising:

a calculation procedure to calculate second encoded data from the JPEG2000 encoded data managed by the first computer, wherein the second encoded data is designated by a user as a portion of the JPEG2000 encoded data and excludes the fragmentary first encoded data stored in the storage means;

a request procedure to request of the first computer the second encoded data obtained in the calculation procedure;

an acquisition procedure to acquire the second encoded data from the first computer;

a storage procedure to store in the storage means the second encoded data obtained by the acquisition procedure;

a segmentation procedure to segment the JPEG2000 encoded data managed by the first computer into a plurality of independent encoded data segments, each segment being a unit of display;

a determination procedure to determine, for each independent encoded data segment, whether all layer encoded data of the plurality of independent encoded data segments are stored in the storage means;

a dummy storage procedure to store in the storage means dummy encoded data if the layer encoded data is not stored in the storage means; and

an output procedure to output the dummy encoded data, the second encoded data, and the fragmentary first encoded data stored in the storage means as encoded data having JPEG2000 format.